

STRAY NOTES ON TEXAS PLANTAGO (PLANTAGINCEAE).—Two species are to be added to those recognized for Texas in my brief 1950 paper (The North Texas species of *Plantago* (Plantaginaceae), Field & Lab. 18: 113-119), and the three varieties of *P. Purshii* I now place under *P. patagonica*.

P. FASTIGIATA Morris, Bull. Torr. Bot. Club 27: 116-117. 1900. *P. insularis* Eastwood var. *fastigiata* (Morris) Jepson, Man. p. 926. 1925. Recently reported from Brewster County by Correll (Rhodora 68: 428, 1966). There are two earlier collections in the SMU Herbarium. One was annotated in 1954 by the late Dr. G. Thomas Robbins as *P. insularis* Eastwood, which is a later homonym (1898) of *P. insularis* (Godron) Nyman (described from Corsica). The second was annotated by Dr. Robbins as *P. Hookeriana* F. & M., but the sheet is mixed, containing one plant each of *P. Hookeriana* and *P. fastigiata*. Both collections are also from Brewster County: Floodplain of Tornillo Creek, near Hot Springs, Big Bend National Park, *J. F. & Perle Brenckle 51110*, 6 March 1951. Big Bend National Park, south of Terlingua Creek, *Eula Whitehouse 19631*, 14 April 1948. In general appearance *P. fastigiata* closely resembles *P. Hookeriana*; the two may be distinguished as follows.

Floral bracts elliptic-orbicular, the very broad scarious margins each markedly wider than the herbaceous central portion	<i>P. fastigiata</i>
Floral bracts oblong-ovate, the scarious margins each equalling or narrower than the herbaceous central portion	<i>P. Hookeriana</i>

P. ELONGATA Pursh, Fl. Am. Sept. 2: 729. 1814. "In Upper Louisiana. *Bradbury*." The type collection was made near present Macy, Thurston Co., northeastern Nebraska, according to I. J. Bassett (Taxonomy of North American *Plantago* L., section *Micropsyllium* Decne., Canadian Journ. Bot. 44: 467-479, 1966; notes on Pursh's type, p. 470).—*P. pusilla* Nuttall, Genera 1: 100. 1818. "On arid saline hills near the Missouri. Flowers in May." According to the account of Nuttall's travels given by Pennell (*Bartonia* 18: 1-51, 1936), Nuttall and Bradbury traveled up the Missouri River together in the spring of 1811, and during May progressed from its junction with the Platte (not far from present Omaha, Nebraska) to that with the White River in South Dakota. Thus the type of *P. elongata* Pursh (which he received from Bradbury) and that of *P. pusilla* Nuttall were collected at about the same time and in the same area, outside the range of *P. pusilla* as mapped by Bassett. Though Nuttall's holotype has not been located (Bassett rightly does not accept as types Nuttall specimens from Arkansas bearing this name), there can be little doubt that his plant is identical with that of Pursh. *P. elongata* is rather rare in Texas. I have seen specimens only from Denton, Grayson and Wichita counties, all in the far north-central part of the state. Bassett cites it from Brazos County; his map shows two localities south of the center of the state. With the help of his treatment and that by Cronquist in Gleason & Cronquist's Manual (pp. 462-464, 1963), I am able

to distinguish two of the three species lumped under *P. elongata* in my earlier account, as follows:

Corolla lobes becoming reflexed in age; taproot prominent, with few laterals *P. elongata*

Corolla lobes becoming erect in age; taproot scarcely more prominent than the numerous laterals (plant usually appearing fibrous-rooted) *P. hybrida*

P. HYBRIDA Barton, Compendium Florae Philadelphicae 2: 214. 1818. (Later in the year than Nuttall's Genera.) *P. pusilla* of authors, not Nuttall (which is the same as *P. elongata*, as noted above). Including *P. heterophylla* Nuttall, Trans. Amer. Philos. Soc. n.s. 5: 177-178. 1835. (See Foster, Rhodora 46: 156-157, 1944, regarding publication date.) *Littorella flexuosa* Raf., New Fl. N.A. 4: 12-13. 1838. This species is frequent in central and eastern Texas. Most recent authors have separated *P. heterophylla*, chiefly on the basis of more numerous seeds, but this does not seem to me to set off more than a poorly defined geographic variety, while such other differences as size of corolla lobes do not permit any separation in the material I have examined (48 sheets from 10 states). Those who wish to maintain *P. heterophylla* as distinct must look further into the identity of Barton's type, since he does not mention number of seeds in his description.

P. PATAGONICA Jacquin, Ic. Pl. Rar. 2: 9, t. 306. 1795. (See Schubert, Contrib. Gray Herb. 154: 3-23, 1945, for probable date.) Judging from published illustrations (Pilger, Pflanzenreich IV. 269 (Heft 102): 360, 1937; Cabrera, Man. Fl. Alrededores de Buenos Aires p. 438, 1953) and a single herbarium sheet at SMU (*Eyerdam et al.*, Calif. Bot. Gard. 2nd Exp. Andes No. 23993, Argentina, Gob. Santa Cruz; 6 plants on sheet), Cronquist was correct in concluding that the South American plant is not specifically distinct from the North American *P. Purshii* R. & S. (Gleason & Cronquist, Man. p. 644, 1953). But none of the three varieties found in Texas is the same as var. *patagonica*, nor is a fourth variety occurring farther west. Their names are as follows.

P. PATAGONICA var. *GNAPHALIOIDES* (Nuttall) Gray, Man. (ed. 2) p. 269. 1856. *P. Purshii* R. & S., Syst. 3: 120. 1818 (March). *P. gnaphalioides* Nuttall (as "*gnaphaloides*"), Genera 1: 100. 1818 (May).

P. PATAGONICA var. *SPINULOSA* (Decaisne) Gray, Syn. Fl. N.A. 2 pt. 1: 391. 1878. (Cited there as "Gray, l.c.," meaning Manual ed. 2, Pacific R. R. Rept. 4, Bot. Calif. 1: but the varietal combination does not appear in these places, only the adoption of the species name *P. patagonica* for North American plants being stated.) *P. spinulosa* Decaisne in DC., Prodr. 13: 713. 1852. *P. Purshii* var. *spinulosa* (Decaisne) Shinnery, Field & Lab. 18: 117. 1950.

P. PATAGONICA var. *breviscapa* (Shinnery) Shinnery, comb. nov. *P. Purshii* var. *breviscapa* Shinnery, Field & Lab. 18: 118. 1950. Dr. Robbins thought this might be only a growth-form depending on habitat or

season, but it is definitely genetic, and is geographically restricted. Its short scapes are like those of var. *patagonica*, but it differs in having elongate floral bracts like those of var. *spinulosa*.

P. PATAGONICA var. **oblonga** (Morris) Shinnery, comb. nov. *P. oblonga* Morris, Bull. Torr. Bot. Club 28: 119. 1901. *P. spinulosa* var. *oblonga* (Morris) Poe, ibid. 55: 411. 1928. *P. Purshii* var. *picta* (Morris) Pilger, Pflanzenreich IV. 269 (Heft 102): 369. 1937. Pilger considered *oblonga* and *picta* to be varieties of different species, but they are hardly separable. If treated as the same, as is done by Munz (Calif. Fl. p. 408, 1959), the name *oblonga* is earlier in varietal rank. It is not known from Texas; the transfer is included here merely for completeness.—Lloyd H. Shinnery.

TESSARIA SERICEA (NUTTALL) SHINNERY, COMB. NOV. (COMPOSITAE).—Based on *Polypappus sericeus* Nuttall, Journ. Acad. Phila. n.s. 1: 178. Aug. 1848. *Berthelotia sericea* (Nuttall) Rydberg, Bull. Torr. Bot. Club 33: 154. 1906. *Tessaria borealis* T. & G. ex Gray, Pl. Wright. 1: 102. 1852. *Pluchea borealis* (T. & G.) Gray, Proc. Amer. Acad. 17: 212. 1882. *Pluchea sericea* (Nuttall) Coville, Contrib. U.S. Nat. Herb. 4: 128. 1893. I am indebted to Dr. Marshall C. Johnston for calling my attention to the fact that although I have been using the above combination, it has never been formally published.—Lloyd H. Shinnery.

BOOK NOTICE

TEXAS FLOWERS IN NATURAL COLORS. Eula Whitehouse. 212 pp., numerous illustrations (from water-color paintings) in color. Third edition, 1967. Dallas County Audubon Society, 5421 Drane Drive, Dallas, Texas 75209.—With both previous editions long out of print (and copies of the first running as high as \$25 on the second-hand market), it is welcome news that the Dallas County Audubon Society has sponsored a new edition. In order to keep the price down, it is not being sold through bookstores or dealers. It may be obtained from the Society at the above address for \$5.25 per copy, postpaid. Profits (if any) will go to the Society's Sanctuary fund.